

Mega City Environments and Resource Management

Public Awareness of and Solutions to Environmental Problems in Developing Countries: Air Pollution in Bangkok

July 29th to August 9th, 2018
at Chulalongkorn University

Rationale

The economy of the countries in Asia and South America has rapidly grown and the number of their population has tremendously increased. Their inhabitants tend to be concentrated in mega cities, resulting in seriously polluted environments and exploitation of natural resources. Slum dwellers, estimated to constitute to one - third of the urban population, urgently need effective methods to improve sanitation, solid waste collection facilities and resource management. It is important that good practice in resource management and sustainable development has to be executed in the way that it will not leave negative impact on the environment. To solve environmental problems, it is essential for experts in the areas, such as city planning, facility design, economics, social sciences and industrial operations, to work together in order to manage problems related to air pollution, water supply, sewage, solid waste collection as well as hazardous waste disposal.

Objectives

With the aforementioned rationale, a specialized academic program, Mega City Environments and Resource Management, which is an integration of the knowledge in engineering, economics, social sciences and medical science, is organized, focusing on in-depth knowledge and skills of those related fields of study. It aims to be part of the student mobility program of the Asian Universities Alliance through the training of human resources, which consist of TWO undergraduate students selected from the AUA member universities, in order to help to broaden their knowledge in the fields they are familiar and unfamiliar with. The Program should consequently contribute to the alleviation of environmental problems in mega cities in Asia and other regions of the world.

About the Programme

In collaboration with counterpart universities, government offices and private organizations in Thailand, will organize a 10-day field exercise program, entitled "Public Awareness of and Solutions to Environmental Problems in Developing Countries: Air Pollution in Bangkok". The program is scheduled from July 29th to August 9th, 2018 at Chulalongkorn University. The participants are TWO undergraduate students, nominated by the member universities of the AUA.

Thailand is, at present, confronting many environmental problems that affect the standards of living of its population. To find solutions to the problems, the Thai government has set up the policies and launched projects nationwide to improve the infrastructure and the environment. As well as the efforts from the government sector, public involvement and input should also contribute to problem solving and consequently result in safe and sustainable development in the future.



Activities

This year program will focus on air pollution, with its broad definition that many include any type of gaseous matters that are harmful to the environment and human health, e.g., PM, SO_x, NO_x, CFCs, CO₂, methane, cigarette smoke and others. In group work, the participants will have the chance to identify air pollution problems in Bangkok, form a hypothesis, conduct a survey and give a presentation to propose how to promote successful public participation for the achievement of SDGs.

Tentative Schedule of the Program

Date	Schedule	
	Morning	Afternoon
29 Jul (Sun)	Departure from the home country of the participants	Arrival in Bangkok
30 Jul (Mon)	Opening Lecture Lecture 1: Lecture from invited experts and/or researcher related to environmental problems in Bangkok	Preliminary assignment presentation +Group meeting
31 Jul (Tue)	Technical visit 1: (Air pollution related site)	+Group meeting
01 Aug (Wed)	Lecture 2: Lecture from Government officers (Environmental management in Bangkok)	Technical visit 2: e.g. Ambient air quality laboratory +Group meeting
02 Aug (Thu)	Lecture 3: Questionnaire survey	+Group meeting
03 Aug (Fri)	Group work	Mid-program presentation
04 Aug (Sat)	Technical visit – incineration plants	
05 Aug (Sun)	City tour + group meeting	
06 Aug (Mon)	Group work + Final presentation	
07 Aug (Tue)	Cultural Activities	
08 Aug (Wed)	Cultural Activities, Farewell Party	
09 Aug (Thu)	Departure from Bangkok	

